

METHODS AND APPARATUSES FOR ELECTROCHEMICAL-MECHANICAL POLISHING

ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for removing material from a microfeature workpiece are disclosed. In one embodiment, the microfeature workpiece is contacted with a polishing surface of a polishing medium, and is placed in electrical communication with first and second electrodes, at least one of which is spaced apart from the workpiece. A polishing liquid is disposed between the polishing surface and the workpiece and at least one of the workpiece and the polishing surface is moved relative to the other. Material is removed from the microfeature workpiece and at least a portion of the polishing liquid is passed through at least one recess in the polishing surface so that a gap in the polishing liquid is located between the microfeature workpiece and the surface of the recess facing toward the microfeature workpiece.